

REPORT
ON
SURVEY OF LABOUR CONDITIONS
IN
ELECTRICAL MACHINERY
FACTORIES IN INDIA



सत्यमेव जयते

LABOUR BUREAU
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PREFACE

Industrial labour and its problems have been the subject of interest, though varying in degree and extent, ever since India entered the industrial field over a century ago. To-day this interest has shifted from prevention of exploitation of labour to providing a fair deal and opportunities for a fuller life to labour. The growing realisation of this approach to problems of labour in India, in the context of present day planned economic development of the country, is provided a sound base by the Surveys that reveal true conditions of labour.

The last detailed survey on a country-wide basis of the working and living conditions of industrial labour was conducted by the Labour Investigation Committee appointed by the Government of India in 1944. The years that followed witnessed far-reaching changes in the set-up of the country, its basic policies and national objectives. As a result, the long-term strategy for economic and industrial advance recognises the well-being of the working class as an essential factor in the overall stability and progress of the country. The adoption of this policy, in the changed circumstances of the country, has brought about a new awakening in the ranks of labour and afforded them much relief in various directions through legislation and other measures.

In order to assess the impact of these measures on the industrial labour and to appraise their present conditions, a scheme for a comprehensive Survey of Labour Conditions was incorporated in the Second Five Year Plan and its execution was entrusted to the Labour Bureau. The Survey was conducted according to a phased programme in 46 industries.* This report presents data regarding Electrical Machinery Factories covered under the scheme during 1961-62.

The present Survey differs considerably from similar investigations in the past in matters of design, scope and presentation of data. It has also certain distinguishing features. For example, it furnishes data separately for large and small establishments in various industries, makes a limited study of labour cost in relation to the benefits and amenities that the workers now enjoy, seeks to fill the gap in the statistics of labour turnover and absenteeism in the factory industries and provides first-hand information on certain important aspects of labour-management relations. Attempt has also been made to collect and interpret data on certain conventional items in a more meaningful way. In the presentation of the data, the effort has been to reduce the information into quantitative terms so as to serve as a bench-mark for purpose of evaluation of changes at a future date. Recourse to general description has been resorted to only where the other type of treatment was not possible.

* Names of these 46 industries are given in the Preface (P. iii) of the Report on Survey of Labour Conditions in Silk Factories in India.

In a survey of this magnitude, it was but natural that many problems had to be faced both in planning as well as execution. Most of these flowed from non-availability of up-to-date frames and absence or improper maintenance of records in many establishments. In many cases the field staff had almost to build up the required statistics from various sources. This naturally imposed a heavy demand on the managements and the Bureau is deeply indebted to them for their whole-hearted co-operation. The co-operation and valuable assistance received from associations of employers and workers, Labour Commissioners as well as Chief Inspectors of Factories and other officials of State Labour Departments is also gratefully acknowledged.

The debt of gratitude that I owe to the Central Statistical Organisation and the Chief Adviser of Factories for evincing keen interest in the Survey and rendering technical advice on various matters is indeed great. I am also thankful to the Employment Division of the Planning Commission for examining the schedule and instructions and offering useful suggestions. I am equally grateful to the Bureau of Labour Statistics, U.S.A., Social Surveys Division, Ministry of Labour and Social Service, U.K., Economics and Research Branch, Department of Labour, Canada and Labour Statistics and Research Division, Ministry of Labour, Japan, whose advice was sought on several technical matters.

The primary responsibility for conducting this Survey and bringing out the reports on individual industries was ably borne by Shri B. N. Srivastava, Deputy Director, whose experience and application came into full play in this assignment. On various statistical problems arising out of the Survey, the requisite technical advice was provided by other officers at Headquarters. This particular industry Report was drafted by Shri Harbans Lal, Assistant Director, who received valuable assistance from Shri Mahesh Chandra, Investigator Grade I. Sarvashri S. P. Gupta and Kanwar Singh, Computers, assisted in computation of data. The field investigations were carried out by Sarvashri S. N. P. Yadav, Anand Kumar Anand, Harjinder Singh, A. S. Parmar, Prem Chand Agarwal, S. K. Rao, S. M. Shinh and B. Raghavan under the supervision of Sarvashri K. Lakshminarayanan, Harbans Singh and Kirpal Singh. To these all my thanks are due.

The views expressed in this report are not those of the Ministry of Labour and Employment, Government of India.

K. C. SEAL
Director

LABOUR BUREAU, SIMLA,

Dated the 1st February, 1965.

CHAPTER I

INTRODUCTION

1.1. *Origin and Growth of the Industry*

Prior to the Second World War, the Electrical Machinery Industry in India was hardly of any significance and most of the country's needs were met by imports. Like many other industries, this industry also received considerable amount of encouragement during the war-time. Drying up of channels of imports led not only general consumers but also various industries to look to indigenous sources of supply for their requirements. In order to meet the demands created by war, as also to cater for the domestic needs for the maintenance and replacement of machines, etc., more and more emphasis was laid on machine building programmes. The Industrial Policy Resolution of 1948 also had its impact on the growth of the Electrical Machinery Industry since it was closely linked with schemes of power development which, in turn, were associated with the growth of the industry in the country.

Ushering in an era of planned economic development of the country in the post-Independence period and all round expansion of industries, coupled with greater power utilisation, gave the Electric Machinery Industry a new sense of importance. At the beginning of the First Five Year Plan, that is, in 1951, there were 19 registered factories with an average daily employment of nearly 2,000 workers in the country. By the close of the First Five Year Plan period, the number of registered factories increased to 26 recording a rise of about 37 per cent. and the number of workers employed therein to about 6,000 showing an increase of 200 per cent. over the 1951 figure. In recognition of the growing importance of electronics in modern industries, special attention has been paid to the growth and development of the Electrical Machinery Industry in the Third Five Year Plan. Besides encouraging growth of the industry in the private sector, the State has itself entered the field for making the country self-sufficient in respect of heavy electrical equipment. A number of factories were set up in the public sector and in a few of them, there is a good deal of foreign participation. As a result, by 1961, the number of registered factories increased to 59 with an average daily employment of nearly 10,000 workers, thus showing an increase of more than two times in the case of factories and four times in respect of employment since 1951.

Statement 1.1 given on the next page shows the distribution of electrical machinery factories registered under the Factories Act, 1948, in various States during 1961.

STATEMENT 1.1

State-wise Distribution of Electrical Machinery Factories and Number of Workers Employed Therein During 1961

State						Number of factories	Average daily employ- ment
(i)						(ii)	(iii)
1.	Delhi	..	..	..	..	1 (1.7)	56 (0.5)
2.	Gujarat	..	..	..	..	1 (1.7)	47 (0.4)
3.	Kerala	..	..	..	..	6 (10.2)	166 (1.6)
4.	Madras	..	..	..	..	4 (6.8)	538 (5.2)
5.	Madhya Pradesh	..	..	..	..	3 (5.1)	1,236 (11.9)
6.	Maharashtra	..	..	..	..	27 (45.7)	3,536 (34.0)
7.	Mysore	..	..	..	..	4 (6.8)	2,754 (26.5)
8.	Punjab	..	..	..	..	1 (1.7)	13 (0.1)
9.	Uttar Pradesh	..	..	..	..	4 (6.8)	258 (2.5)
10.	West Bengal	..	..	..	..	8 (13.5)	1,800 (17.3)
Total						59 (100.0)	10,404 (100.0)

NOTE :—Figures shown in brackets are percentages to the respective totals.

Source :—Returns received from the State Governments under the Factories Act, 1948, for the year 1961.

It will be seen from the above Statement that the industry is scattered almost throughout the country and is shared by all the States or territories except Bihar, Andhra Pradesh, Rajasthan, Assam, Himachal Pradesh, Orissa, Jammu and Kashmir, Tripura and Manipur. From the point of view of number of factories, the leading position is that of Maharashtra, accounting for nearly 46 per cent. of the total factories in the industry, followed by West Bengal and Kerala. Judged from the number of workers employed in the industry also, Maharashtra is the most important State.

1.2. *Genesis of the Survey*

The first comprehensive survey of conditions of labour in various industries in India on a country-wide basis was conducted by the Royal Commission on Labour during 1929—31. Its report and findings formed the basis of various ameliorative measures. After a lapse of over a decade, i.e., in 1944, the Government of India appointed another Committee, viz., the Labour Investigation Committee, to enquire into the conditions of labour in all important industries. The Committee conducted detailed investigations in 38 industries during 1944-45 and, besides a main report on labour conditions in general, published individual reports in respect of various industries. These reports provided valuable material for the formulation of labour policy. The Electrical Machinery Industry was not surveyed as a separate industry by the Committee obviously because this industry was not an important one at that time. The years that followed witnessed many changes of far-reaching significance. For instance, many legislative measures were adopted to improve working and living conditions and several schemes were introduced for promoting welfare and social security of workers. The setting up of adjudication machinery also led to an improvement in conditions of work and wages in various industries. Above all, attainment of Independence by the country gave a new status to the working class. In view of these developments, the Ministry of Labour and Employment as well as the Planning Commission considered it necessary that a fresh comprehensive survey of labour conditions in various industries should be conducted so that it may be possible to assess the effects of the various measures adopted by Government and obtain a precise picture of the existing conditions and problems of labour for purposes of deciding the future course of action. Accordingly, a scheme for the conduct of a Survey of Labour Conditions was included in the Second Five Year Plan and the Labour Bureau was entrusted with the execution of the Scheme.

1.3. *Scope and Design*

A note* appended to the report gives details relating to the sample design and method of estimation adopted. In view of absence of a complete list of all electrical machinery factories in the country, the scope of the survey was restricted to establishments registered under the Factories Act, 1948. The 1959 list of registered factories, which was used as a frame, indicated concentration of electrical machinery factories in Maharashtra. It was, therefore, decided to treat it as a separate regional stratum and to club the rest of the factories to form the Residual Group.

For purposes of drawing samples, units of the industry were divided into large and small size-groups and the cut-off point used for the classification of units into two size-groups was the same as used for the Wage Census conducted by the Bureau in 1958-59. It was considered that a 25 per cent. sample of large size units and 12½ per cent. of small size establishments would yield reliable results. However, earlier surveys conducted by the Bureau have shown that on account of non-availability of up-to-date frames, quite a large number of sampled establishments were found to have ceased functioning or to

* Appendix.

have changed the line of production when they were visited. In order to safeguard against undue shrinkage of the sample size due to such contingencies, it was decided to enlarge the sample size suitably in the light of the experience of the Wage Census conducted by the Bureau and on the basis of a study of closures of establishments in the past few years as revealed from the annual list of registered factories. The following Statement shows the number of factories alongwith the number of workers employed therein (a) in the frame, (b) in the sample, and (c) actually covered.

STATEMENT 1.2

Number of Electrical Machinery Factories and Persons Employed Therein in the Frame and As Covered by the Survey

Contro	In the frame (1959)		In the sample selected		In the sample ultimately covered as per 1959 frame	
	Number of factories	Number of workers employed	Number of factories	Number of workers employed	Number of factories	Number of workers employed
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Maharashtra ..	24	2,494	4 (16·7)	194 (7·8)	4 (16·7)	194 (7·8)
2. Residual ..	35	4,597	8 (22·9)	1,094 (23·8)	7 (20·0)	1,065 (23·2)
3. All India ..	59	7,091	12 (20·3)	1,288 (18·2)	11 (18·6)	1,259 (17·8)

NOTE :—The figures in cols. (ii) and (iii) are based on Factories Act Returns, 1959, as were available at the time of drawing samples. They are not final figures and are thus likely to differ from final figures published elsewhere.

It would be seen from the above Statement that ultimately the Survey covered 18.6 per cent. of the electrical machinery factories and 17.8 per cent. of the workers employed therein. Since only those factories came in the sample as featured in the frame and as it was not possible to take account of new factories which came into being during the period while the Survey was in progress, the information given in this report should be treated to relate to conditions in the factories which were in existence during the period to which the frame related (i.e., 1959) and which continued to exist at the time of the Survey.

The data for the Survey were collected by a specially trained field staff of the Bureau by personal visits to the sampled establishments. With a view to testing the schedule* and instructions prepared for the Survey as also to impart training to the field staff, a pilot enquiry was conducted in September and October, 1959. On the basis of the experience gained, the schedule and instructions were suitably revised. The main field enquiry in this industry was launched in July, 1961 and the Survey was completed in August, 1962. Hence, the information given in this report, except where mentioned otherwise, should be treated to relate to this period.

*The schedule used for the Survey has been given as Appendix II in the Report on Survey of Labour Conditions in Silk and Jute Factories in India.

CHAPTER II

EMPLOYMENT

2.1. Composition of the Working Force

With a view to ensuring comparability of statistics collected from different sampled establishments, data pertaining to the composition of working force were collected for a fixed date i.e., 30th June, 1961. The results of the Survey show that on this date the estimated total number of workers employed in the industry, as a whole, was nearly 11,900. This figure is higher by about 1,500 when compared with the statistics received under the Factories Act for the year 1961. To a large extent, the difference is due to the fact that whereas the statistics collected under the Survey relate to a fixed point of time, those received under the Factories Act represent average daily employment during the year. Moreover, the former relate to all persons on roll, whether covered under the Factories Act or not, whereas the latter relate only to those covered under the Act.

2.2. Distribution by Broad Occupational Groups

The following Statement (2.1) shows the distribution of workers by broad occupational groups, viz., (i) Professional, Technical and Related Personnel, (ii) Administrative, Executive and Managerial Personnel, (iii) Clerical and Related Personnel (including Supervisory), (iv) Production and Related Workers (including Supervisory), and (v) Watch and Ward and Other Services. The definitions used for the Survey for the above categories of workers were the same as adopted by the I.L.O. in its "International Standard Classification of Occupations".

STATEMENT 2.1

*Estimated Distribution of Workers by Broad Occupational Groups--
30th June, 1961*

Centre	Estimated number of employees					
	Total	Professional, Technical and Related Personnel	Administrative, Executive and Managerial Personnel	Clerical and Related Personnel (including Supervisory)	Production and Related Workers (including Supervisory)	Watch and Ward and Other Services
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Maharashtra ..	3,523	122 (3·4)	29 (0·8)	231 (6·6)	3,064 (87·0)	77 (2·2)
2. Residual ..	8,383	615 (7·4)	54 (0·6)	819 (9·8)	6,573 (78·4)	322 (3·8)
3. All India ..	11,906	737 (6·2)	83 (0·7)	1,050 (8·8)	9,637 (80·9)	399 (3·4)

NOTE :—(i) The figures relate to all workers, i.e., those covered as well as not covered under the Factories Act, 1948.

(ii) Figures in brackets are percentages to the total in col. (ii).

It will be seen from the Statement that "Production and Related Workers (including Supervisory)" constituted the bulk of the working force and accounted for about 81 per cent. of the total. The next group in the order of importance was "Clerical and Related Workers (including Supervisory)" which accounted for about 9 per cent. of the total, followed by "Professional, Technical and Related Personnel" (6.2%), "Watch and Ward and Other Services" (3.4%) and "Administrative, Executive and Managerial Personnel" (0.7%).

The figure of 11,906, mentioned above, includes persons deemed to be workers and hence covered under the Factories Act, 1948, as also those who were not considered to be workers for purposes of the Act. Data collected during the Survey indicate that the proportion of employees who were not covered under the Factories Act, 1948, was insignificant*. All these employees belonged to the groups "Administrative, Executive and Managerial Personnel" and "Professional, Technical and Related Workers" and were found employed in only two of the factories covered in the Residual Group.

2.3. *Employment of Women and Children*

None of the factories covered in the course of the Survey employed any woman or child worker.

2.4. *Time-rated and Piece-rated Workers*

Both the systems of payment, viz., time as well as piece, were found to be prevalent in the industry but the predominant system was payment by time, which covered 95.7 per cent. of production workers employed directly. About 4 per cent. of workers were piece-rated and the rest were unpaid apprentices.

Piece-rated workers were found to be employed only in a few factories covered in the Residual Group constituting about 6 per cent. of the production workers. In Maharashtra, the universal practice was payment by time. Only one of the factories covered in the Residual Group was found to be employing unpaid apprentices.

2.5. *Contract Labour*

No contract labour was found to be employed in any of the electrical machinery factories covered in the Survey.

2.6. *Employment Status*

Data on employment status relate only to production workers covered under the Factories Act and employed directly by the managements (i.e., excluding those employed through contractors). Classification of workers into permanent, temporary, probationers, *badli*, casual, etc., is regulated by Standing Orders framed under the Industrial Employment (Standing Orders) Act, 1946 or some of the State Acts, e.g., the Bombay Industrial Relations Act, 1946. However, since these Acts usually apply to only those units which employ more than a certain minimum number of workers, many of the factories in the industry had not framed such Standing Orders. In such cases, reliance had to be placed on the version of the managements. In June, 1961, of the estimated number of about 9.6 thousand workers employed directly, the proportion of permanent, temporary, etc. was as follows:—

*i.e., only 0.6 per cent. of the estimated working force in the industry in the entire country.

STATEMENT 2.2

Estimated Percentage Distribution of Production Workers Employed Directly by Employment Status—June, 1961

Centre	Estimated number of production workers	Percentage distribution of workers					
		Perma- nent	Proba- tioners	Tempo- rary	Badli	Casual	Appren- tices
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1. Maharashtra ..	3,064 (100.0)	87.9	..	5.9	..	..	6.2
2. Residual ..	6,573 (100.0)	59.9	0.5	18.3	..	..	21.3
3. All India ..	9,637 (100.0)	68.8	0.3	14.4	..	..	16.5

In the country, as a whole, about 69 per cent. of production workers in the industry were permanent, nearly 16 per cent. apprentices, 14 per cent. temporary and the rest were probationers. There was no system of engaging badli or casual workers. The proportion of workers enjoying permanent status was higher in the factories covered in Maharashtra (88%) and lower in the Residual Group (60%). Probationers were employed in two of the factories belonging to the Residual Group.

2.7. Length of Service

Data concerning length of service collected in the course of the Survey also pertain to production and related workers (including supervisory) employed directly by the managements and covered under the Factories Act. The details are presented in the following Statement (2.3). Wherever managements maintained any records showing the date of appointment of their employees (e.g., service cards, leave records, etc.), the information was collected from such records, but in their absence the version of the management was taken.

STATEMENT 2.3

Estimated Percentage Distribution of Production Workers Employed Directly According to Length of Service—June, 1961

Centre	Estimated number of production workers employed directly*	Percentage of workers with a service of			
		Less than one year	1 or more but less than 5 years	5 or more but less than 10 years	10 years and over
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1. Maharashtra ..	3,064	13.6	30.5	16.7	39.2
2. Residual ..	6,556	34.0	47.7	10.9	7.4
3. All India ..	9,620	27.5	42.2	12.8	17.5

*Excludes unpaid apprentices.

The figures show that in the industry, as a whole, about 70 per cent. of the workers had a service of less than five years and only about 17 per cent. had a service of 10 or more years to their credit. Preponderance of workers with shorter length of service seems to be largely due to the fact that most of the electrical machinery factories came up only recently. It will be seen from the Statement that the proportion of workers with longer length of service was higher in Maharashtra. Whereas in the Residual Group, the proportion of workers with a service of 10 years or more was 7 per cent., and those having less than one year's service formed about 34 per cent., but in the factories covered in Maharashtra, the percentage of such workers was 39 and 14 respectively.

2.8. Absenteeism

Statistics relating to absenteeism were collected for the period July, 1960 to June, 1961, in respect of production workers employed directly by the managements excluding casual and *badli* labour and unpaid apprentices. The following Statement (2.4) shows the rate of absenteeism in electrical machinery factories in the country.

STATEMENT 2.4

Estimated Absenteeism Rate in Electrical Machinery Industry During July, 1960 to June, 1961*

Month							Absenteeism rate (in percentages)		
							Maha-rashtra	Residual	All India
(i)							(ii)	(iii)	(iv)
1960									
July	..	..	..	..	..	..	10.2	8.1	8.8
August	..	..	..	..	..	..	16.6	8.4	11.3
September	..	..	..	..	..	..	14.4	8.9	10.8
October	..	..	..	..	..	..	18.3	10.7	13.4
November	..	..	..	..	..	..	14.6	9.0	10.9
December	..	..	..	..	..	..	16.6	10.0	12.3
1961									
January	..	..	..	..	..	..	14.4	11.7	12.6
February	..	..	..	..	..	..	15.9	12.0	13.3
March	..	..	..	..	..	..	20.4	10.9	14.3
April	..	..	..	..	..	..	19.0	11.4	14.0
May	..	..	..	..	..	..	22.2	9.6	13.8
June	..	..	..	..	..	..	15.0	9.9	11.6
Average 1960-61	..	..	..	..	..	..	16.5	10.1	12.3

* In percentages.

It will be seen from the Statement that in the industry, as a whole, the rate of absenteeism during 1960-61 was 12.3 per cent. The rate was higher in Maharashtra (16.5%) and lower in the Residual Group (10.1%). Since managements generally did not maintain any records of causes of absences, it was not possible to collect data by causes. However, some general information was obtained. It was found that absenteeism was generally high in the months of February, March, April, May and October. The absenteeism during these months was attributed to harvesting season, festivals and various social and religious functions.

In order to check absenteeism, only one factory covered in Maharashtra paid attendance bonus at the rate of Rs. 15 per year to those production workers who were present for at least 300 days in a year. However, it was reported that this measure was not fruitful.

2.9. Labour Turnover

Statistics of labour turnover were collected for the same period and for the same set of workers for whom data pertaining to absenteeism were collected. The following Statement (2.5) shows the rates of accession and separation in the industry during the period July, 1960 to June, 1961.

STATEMENT 2.5

Estimated Accession and Separation Rates in Electrical Machinery Industry During July, 1960 to June, 1961

Month	Accession rate (in percentages)			Separation rate (in percentages)		
	Maha-rashtra	Residual	All India	Maha-rashtra	Residual	All India
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
<i>1960</i>						
July	0.6	5.3	3.6	1.4	3.3	2.7
August	1.5	3.9	3.1	1.7	3.3	2.7
September	1.2	2.1	1.8	0.6	1.8	1.4
October	1.4	3.3	2.7	3.4	3.7	3.6
November	2.8	7.6	6.0	1.0	2.9	2.3
December	4.2	3.3	3.6	0.6	2.8	2.0
<i>1961</i>						
January	1.4	3.4	2.8	1.4	1.6	1.5
February	4.5	2.3	3.0	2.0	2.6	2.4
March	1.4	3.1	2.5	2.1	5.1	4.1
April	1.2	6.5	4.7	1.4	3.9	3.0
May	1.9	8.6	6.4	1.0	2.7	2.2
June	2.2	8.2	6.2	2.0	4.8	3.9
Average 1960-61	2.0	4.8	3.9	1.5	3.2	2.6

The annual accession as well as separation rates in the industry, as a whole, were not very high, being of the order of 3.9 and 2.6 per cent. respectively. As between different months, the rate ranged from 1.8 to 6.4 per cent. in the case of accessions and from 1.4 to 4.1 per cent. in the case of separations. Both accession and separation rates were lower in the factories covered in Maharashtra.

In the course of the Survey, an attempt was also made to collect statistics relating to separations by causes. Rarely any factory maintained any records of causes of separations and hence the data obtained are, more or less, based on the version of the managements. The information so collected shows that about 80 per cent. of separations were on account of 'quits*', nearly 19 per cent. were due to discharges or dismissals and the rest were due to retirement or death.

2.10. *System of Recruitment*

At the time of the Survey, it was found that different methods of engaging workers were prevalent in the industry but the most popular method was recruitment through Labour Office. Of the total number of workers employed in the industry, 42.7 per cent. were found to have been recruited in this manner. This system was found to be in vogue in two factories, one each located in Maharashtra and the Residual Group. While the factory in the Residual Group recruited all workers through Labour Office, the other appointed only monthly-rated workers through its Labour Office and all the rest were recruited at the factory gate. The percentage of workers recruited through other methods in all the establishments covered in the course of the Survey was as follows: (i) recruitment through departmental heads 24.9, (ii) recruitment at the factory gate 26.0, (iii) recruitment through Employment Exchanges 5.8 and (iv) recruitment through advertisement 0.6. The services of Employment Exchanges were used by only one factory covered in the Residual Group and the categories of workers recruited through them were generally apprentices.

2.11. *Training and Apprenticeship*

At the time of the Survey, nearly 57 per cent. of the factories had training facilities and 15.2 per cent. of production workers in June, 1961 were trainees. The system of imparting training existed in two of the sampled factories in Maharashtra and four in the Residual Group. It was noticed that in two other units covered in Maharashtra, managements treated workers as apprentices at the time of recruitment and continued to employ them as such, though neither of them had any training or apprenticeship scheme. It is due to this reason that the percentage of apprentices given in Statement 2.2 is higher than those actually receiving training.

The occupations in which training was being imparted were generally assembling, turning, testing, fitting, winding, smithing, transforming, etc. Only one factory in Maharashtra had a regular scheme. Others had no systematic arrangements and training was being imparted on an *ad hoc* basis.

*"Quits are termination of employments initiated by employees because of acceptance of jobs elsewhere, dissatisfaction, marriage, maternity, ill-health, unauthorised absence, etc".

Usually, opportunities for receiving training were open to general public. However, in about one-fifth of the factories, the managements stated that they preferred those persons who had already received training in some institute run by Government. Nearly an equal number of factories preferred workers' relatives for imparting training. Only about 15 per cent. of the factories had prescribed educational qualifications. They selected trainees who had passed the S.S.L.C. examination.

The period of training varied from factory to factory and occupation to occupation and ranged from 6 months to 3 years. All the factories imparting training were paying some remuneration to trainees. The rate at which payment was being made differed from factory to factory and even within a factory from trade to trade and ranged from Rs. 35 to Rs. 65 per month. Wherever trainees were on a daily-rate basis, the range was Rs. 1.15 to Rs. 2.50 per day. Only in one of the factories covered, which was located in Maharashtra, trainees were being paid dearness allowance in addition to pay. No arrangements existed anywhere for theoretical courses. The management of only one factory in the Residual Group providing training facilities insisted on a written contract. None of the factories surveyed guaranteed employment to trainees after the completion of the training period.

CHAPTER III

WAGES AND EARNINGS

3.1. *Wage Revisions and Minimum Rates of Wages*

There has been no standardisation of wages in the Electrical Machinery Industry on a country-wide basis. The wage structure in different factories at the time of the Survey was found to be generally based on either individual or collective bargaining between workers and employers. Consequently, it was found that the rates of wages varied from one centre of the industry to another and, at times, even in different units in the same centre. Data collected in respect of number of wage revisions since 1956 affecting majority of workers in the establishments show that such wage revisions took place in only some of the factories covered in the Residual Group. On this basis, the percentage of factories in which wage revisions took place in the industry is estimated to be about 23. In all these factories, wage revisions took place only once since 1956. In one-third of these factories, the revisions were due to voluntary decision of the management, in the rest they were the result of mutual agreements between employers and workers.

Since the Bureau had already conducted an Occupational Wage Survey, no attempt was made to collect data for individual occupations but information regarding rates of wages of the lowest-paid workers in each sampled factory was collected. At the time of the Survey, the daily consolidated wages of the lowest-paid men workers were found to vary from Rs. 1.15 to Rs. 4.97, depending upon the area where the factories were located and the occupations on which such workers were employed. In some of the establishments, the lowest-paid workers were employed as *mazdoors* or helpers, while in others they were employed on better-paid jobs like machinists, drillers, winders, fitters, cleaners, etc. As already stated in Chapter II (para 2.3), no woman or child labour was employed in any of the sampled factories.

3.2. *Pay-Periods*

The predominant pay-period in the industry was a month and it covered about 73 per cent. of the workers. Of the rest, 24 per cent. were paid once in a fortnight and the remaining once a week. Except for two factories in the Residual Group, all others surveyed had only a month as their pay-period. In these two factories, about 71 and 10 per cent. of the workers were being paid fortnightly and weekly wages respectively and the rest were monthly paid.

3.3. *Earnings*

In the course of the Survey, data were collected in respect of earnings by broad groups of workers, i.e., all workers (covered under the Factories Act), all production workers (separately for men, women and children), lowest-paid workers employed directly as well as through contractors, clerical employees and watch and

ward and other related workers. With a view to ensuring comparability of the data, information relating to earnings was collected for one pay-period immediately preceding 30th June, 1961. The average daily earnings of all categories of workers are discussed in the following paragraphs.

The estimated average daily earnings of all workers in the electrical machinery factories in the country were Rs. 5.52 in June, 1961. They were Rs. 8.35 in Maharashtra and Rs. 4.37 in the Residual Group.

In the case of production workers and the lowest-paid production workers employed directly*, the average daily earnings in the industry were estimated to be Rs. 5.18 and Rs. 2.05 respectively. In both the cases, the earnings were higher in Maharashtra, being Rs. 8.16 and Rs. 3.91 respectively. In the Residual Group, the average daily earnings were Rs. 3.84 in the case of production workers and Rs. 1.35 for the lowest-paid production workers.

The average daily earnings of 'Clerical and Related Workers' were Rs. 8.51 in June, 1961, being Rs. 8.52 and Rs. 8.45 in the factories covered in the Residual Group and Maharashtra respectively. Similarly, the average daily earnings of persons in the group 'Watch and Ward and Other Services' were Rs. 3.52 in June, 1961. They were Rs. 4.98 in Maharashtra and Rs. 3.20 in the Residual Group. The average daily earnings of this group of employees were higher than those of the lowest-paid production workers but lower than those of all production workers.

3.4. Components of Earnings

The following Statement shows the earnings of all workers by various components.

STATEMENT 3.1

Estimated Average Daily Earnings by Components of All Workers in the Electrical Machinery Industry—June, 1961

(In Rupees)

Centre	Basic earnings (basic wage and dear-ness allowance)	Production/Incentive bonus or pay	Night shift allowance	Housing allowance	Transport allowance	Overtime allowance	Other allowances	Total
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
1. Maharashtra	8.05 (96.4)	..	†	..	0.23 (2.8)	0.07 (0.8)	†	8.35 (100.0)
2. Residual ..	3.82 (87.4)	0.48 (11.0)	..	..	..	0.07 (1.6)	..	4.37 (100.0)
3. All India ..	5.05 (91.5)	0.34 (6.1)	..	..	0.06 (1.1)	0.07 (1.3)	..	5.52 (100.0)

(Figures in brackets are percentages to the respective total).

†Indicates that the figure was less than Re. 0.005 per man-day.

*Contract labour was not employed in any of the factories covered.

3.4.1. Basic Earnings—The term 'basic earnings' includes basic wage and dearness allowance, wherever paid separately, or consolidated wages where no dearness allowance is being paid as a separate component. It is estimated that about 38 per cent. of the factories in the industry were paying a separate dearness allowance to their employees. Of the factories paying dearness allowance and covered in the course of the Survey, only in one in Maharashtra it was linked to consumer price index number. Another factory in the same State paid dearness allowance at 60 per cent. of basic wages to all categories of employees. In all the rest, the amounts paid as dearness allowance varied according to income groups.

In the country, as a whole, basic earnings constituted about 91 per cent. of the total earnings. The proportion, which this component formed to the total earnings, was 96 per cent. in Maharashtra and 87 per cent. in the Residual Group.

3.4.2. Production or Incentive Bonus or Pay—This component formed about 6 per cent. of the total earnings of workers. The system of paying production or incentive bonus was found to be in vogue in one factory each in Maharashtra and the Residual Group. On this basis, the percentage of factories paying production or incentive bonus for the industry, as a whole, is estimated to be about 15. In the factory in Maharashtra, all production and supervisory workers were entitled to receive such a bonus each month if the production exceeded the prescribed norms. The rate of payment varied from 2½ per cent. of total wages earned in case production was higher by up to 25 per cent. to 10 per cent. if it was 76 to 100 per cent. above the norm. The other factory in the Residual Group had production as well as incentive bonus schemes. The former covered all workers who had completed one year of service. Norms were prescribed for each production department. If workers of any of these departments achieved the prescribed target within a specified period, they were paid a certain percentage of their basic pay as production bonus. The incentive bonus scheme was applicable to persons employed on certain jobs only. In this case also, norms were prescribed and those workers who completed their job before the specified time were paid extra wages as incentive bonus on the basis of the number of hours saved.

3.4.3. Transport Allowance—Only two factories covered in Maharashtra paid transport allowance to their workers. In one, it was paid to all provided they were not allowed to travel free in the undertaking's vehicles and the rate of payment ranged from Re. 0.15 to Re. 0.25 per day depending upon the distance of residence from the work place. Those employees who had completed 15 years of service and were drawing basic salary of Rs. 125 per month or more were permitted, at their option, to travel free in the company's conveyance. In the other factory, payment of this allowance was at the discretion of the management and the rate varied from Rs. 10 to Rs. 25 per month. This component formed an insignificant proportion of the total earnings.

3.4.4. Overtime Allowance—It is estimated that overtime payments were made in about 45 per cent. of the factories in the country, but its contribution to the total earnings was negligible.

3.4.5. *Other Allowances*—Only one establishment in Maharashtra was found to be paying attendance bonus and that too to production workers alone. The payment was made at the rate of Rs. 15 at the end of the year to all those who attended work for at least 300 days during the year.

3.5. *Annual Bonuses*

None of the factories visited had any profit-sharing scheme but the system of paying year-end bonus on an *ad hoc* basis was found to be in vogue in three factories, i.e. one in Maharashtra and two in the Residual Group. Thus, it is estimated that the system of paying such a bonus existed in about 19 per cent. of the factories in the industry, as a whole. In one of the factories, payment was made on the basis of a voluntary agreement between the management and workers, while in the rest, bonus was paid at the discretion of the employers. The categories of employees entitled to bonus and the rate of payment differed from factory to factory. One of the factories covered in the Residual Group paid this bonus at the rate of one month's pay to those professional and technical personnel who had completed one year's service and whose performance during the concerned year was found to be satisfactory by the management. In the other factory situated in the Residual Group, it was paid to all employees who had completed one year's service and the rate of payment was 2 months' average basic wages. The factory in Maharashtra paid this bonus at the rate of one month's pay to all categories of workers provided they had completed three months' satisfactory service. Everywhere payments were made in cash.

3.6. *Festival Bonus*

The system of paying festival bonus to all workers was found to be existing in only one factory covered in the Residual Group. The payment was at the discretion of the management but, if made, it was calculated on the basis of one-twelfth of wages earned during the bonus year. Payments were made in cash.

3.7. *Other Bonuses*

Only one factory in the Residual Group was found to be paying 'good service reward' to all employees who worked for 280 days in a year, helped to increase production and maintained industrial peace. The rate of payment was one week's basic wages in a year and it was made in cash.

3.8. *Fines and Deductions*

The Survey results show that none of the units surveyed was imposing any fine on its workers. Deductions, wherever made, were in conformity with the provisions of the Payment of Wages Act.

CHAPTER IV

WORKING CONDITIONS

4.1. *Shifts*

The Survey results indicate that about 43 per cent. of the factories in the Electrical Machinery Industry worked only one shift, nearly 53 per cent., two shifts and the rest three shifts a day. The third shift, wherever worked, employed only a few employees who attended to moulding process.

Night-shift working was reported in about 18 per cent. of the total factories in the country. All of them were located in the Residual Group and had a regular system of transferring workers from one shift to another. In some of them, the change-over was effected after a week, while in others after a fortnight. None of them paid any allowance or provided amenity to those employees who worked in night-shifts.

4.2. *Hours of Work*

About 76 per cent. of the factories had prescribed an 8-hour day or a 48-hour week for their workers. In the remaining factories, the working hours were more than 8 on the first five days of the week and less on Saturdays, thus making a 48-hour week or even less. Everywhere the hours of work in night-shifts were 8.

The daily spread-over of hours of work ranged between 8 and 9½ hours in all the factories in the country and the period of rest-interval varied from half an hour to one and a half hours. Except one factory in the Residual Group, where no rest-interval was allowed to workers engaged on moulding work in the third shift, elsewhere no violations were noticed in regard to hours of work and rest-intervals in any of the sampled factories.

4.3. *Dust and Fumes*

In the course of the Survey, it was noticed that there were certain manufacturing processes which caused considerable amount of dust. These processes were generally buffing, moulding and polishing. It is estimated that about 19 per cent. of electrical machinery factories in the country had such processes. The managements of all these factories were found to have taken precautionary measures, the standards of which varied. Everywhere, dusty processes were isolated and almost all had installed local exhausts. A few had also installed general exhaust systems and were using wet method for dust suppression. Only one factory had supplied protective equipment in the form of dust-masks. House-keeping was found to be satisfactory in all the factories having dusty processes.

The processes which were found to be emitting fumes or vapours were cupola (forging) and baking. Such processes were noticed in only one of the factories belonging to the Residual Group. This establishment had installed local as well as general exhaust for arresting fumes.

4.4. *Seats for Workers*

Under the Factories Act, 1948, it is obligatory on the part of the managements to make suitable arrangements for sitting for all such workers as are obliged to work in a standing position so that they may take advantage of any opportunity for rest which may occur in the course of the work. It is estimated that nearly 71 per cent. of the factories in the country had complied with the above requirement. The reasons adduced by the defaulting employers were that the nature of work was such that it involved continuous movement of workers and required their constant attention and, hence, it was useless to provide seats. A few also maintained that if seats were provided to workers, their efficiency would be affected.

4.5. *Conservancy*

The Factories Act, 1948, requires every employer to maintain an adequate number of latrines and urinals for the use of workers, separately for men and women. It not only lays down the scale of conservancy arrangements but also provides that they should be adequately lighted, ventilated and maintained in a clean and sanitary condition at all times.

All the factories surveyed were found to have provided latrines. However, the type of arrangements made varied considerably. It is estimated that in the industry, as a whole, about 73 per cent. of the factories had water-borne sewers, 4 per cent. septic tanks, 14 per cent. dry-type bore holes and the rest dry-type pans. All the factories covered in Maharashtra had water-borne sewers only. None of the factories surveyed employed women and as such it was not necessary for them to make separate arrangements for such workers. All the factories were found to have complied with the provision of law in regard to proper screening of latrines. As regards provision of water taps near latrines, only about 14 per cent. of the factories were found to be defaulters. Floors of latrines were impervious and walls were plastered in all the units.

The position in regard to urinals, however, was not as good. It is estimated that only about 76 per cent. of the factories in the country had provided urinal facilities. Of those which had made such arrangements, in all, except one factory in the Residual Group, the number of seats were according to the prescribed scale. In most of the factories, permanent structures had been put up for latrines and urinals. As regards sanitary condition, it was found that the arrangements left much to be desired in about 17 per cent. of the factories.

4.6. *Leave and Holidays with Pay*

4.6.1. *Earned Leave*—All the factories covered during the Survey were granting earned or annual leave with pay to their employees. They were generally following the provisions of the Factories Act in regard to period of leave, qualifying conditions, rate of payment, etc. But some of the factories had also their own scheme of granting such leave to certain categories of employees. For

example, in one of the factories covered in Maharashtra, earned leave was being given to all workers after completion of one year's service or confirmation at the rate of 24 days in a year. During leave, workers were entitled to full pay including allowances. Similarly, in another factory in the same State, clerical and technical staff, who had completed at least one year of service, were allowed 30 days' leave in a year with full pay.

With a view to assessing the extent of benefit actually enjoyed by workers, statistics were collected about the number of days enjoyed as leave by workers in each unit during 1960 and the information so collected is given in the following Statement.

STATEMENT 4.1

Estimated Percentage of Workers Granted Earned Leave with Pay During 1960

Centre	Estimated average daily number of workers employed in 1960	Estimated number of workers who enjoyed leave in 1960	Estimated percentage of workers who enjoyed leave to the total employed	Estimated percentage distribution of workers who enjoyed leave by period of leave taken							
				Up to 5 days	6 to 10 days	11 to 15 days	16 to 20 days	21 to 25 days	26 to 30 days	Over 30 days	
				(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)
1. Maharashtra ..	2,768	2,359	85.2	10.2	9.3	14.4	15.4	14.3	11.7	24.7	
2. Residual ..	6,326	3,993	63.1	11.0	13.0	30.6	22.6	15.8	6.7	0.3	
3. All India ..	9,694	6,352	69.8	10.7	11.6	24.5	19.9	15.3	8.6	9.4	

It will be seen from the Statement that in the industry, as a whole, about 70 per cent. of workers enjoyed leave during 1960. Regarding the number of days enjoyed as leave, the maximum concentration was in the groups "11 to 15 days" and "16 to 20 days". In fact, these two groups accounted for 44 per cent. of the total.

The object of granting earned leave to workers is to provide them some period of rest and recuperation. But it was noticed in the course of the Survey that not all workers in every factory enjoyed leave. In nearly 37 per cent. of the factories in the country, either all or a few workers were being paid wages *in lieu* of leave due to them at the end of the year, thus defeating the very purpose of the law.

4.6.2. *Casual Leave*—The practice of granting casual leave with pay, in addition to paid annual leave, was found to be in vogue in about 47 per cent. of the factories in the industry. Of the factories granting casual leave, in almost half of them the benefit was available to all workers. In the rest, it was available either to clerical staff or to monthly-rated employees only. About 67 per cent. of establishments granting casual leave had prescribed certain qualifying conditions like completion of three months' or one year's service. No such conditions were laid down in the remaining factories. The period of leave allowed in a year varied from one factory to another and ranged between 3 and 15 days.

4.6.3. *Sick Leave*—Wherever the Employees' State Insurance Scheme was in force, workers were entitled to sick leave with cash benefits subject to certain qualifying conditions. However, in those areas where the Scheme was not in force, granting of sick leave with pay was entirely at the discretion of the managements. In the course of the Survey it was found that three factories (i.e., one in Maharashtra and two in the Residual Group, representing about 28 per cent. of the total factories in the country) had a system of granting sick leave with full pay to their employees. Of these, one of the factories located in the Residual Group and in the area where Employees' State Insurance Scheme was not in operation granted sick leave with full pay for 4 days in a year to all workers who had completed 3 months' service. In another factory belonging to the same Group but located in the implemented area, sick leave was being allowed by the management to those employees who had a continuous service of 240 days and were drawing over Rs. 400 per month. The period of leave allowed in a year was 7½ days on full pay and 15 days on half pay. Other employees were getting the benefit under the E.S.I. Scheme. In the factory situated in Maharashtra, this benefit was available to all those employees who had completed one year of service and the period of leave allowed was 10 days in a year with full pay.

4.6.4. *National and Festival Holidays*—The system of granting national and festival holidays with pay was found to be widely prevalent in the industry throughout the country. At the time of the Survey, all the establishments covered were found to be granting such holidays to their employees. The number of holidays allowed in a year, however, varied from factory to factory and ranged from 2 to 16 days. About 76 per cent. of them granted 6 to 10 days, 15 per cent. up to 5 days and the rest 11 to 16 days in a year. In about 61 per cent. of the factories, the qualifying condition prescribed for the grant of such holidays was that the worker must be present on the working day preceding or following the holiday, while in the rest no such condition was insisted upon.

4.6.5. *Weekly off*—All the factories throughout the country were found to be complying with the provisions of the law in regard to the grant of weekly off to their employees. However, except in the case of monthly-rated staff, such offs were without pay. In some cases, however, the managements insisted on the presence of the monthly-rated employees on the preceding or succeeding day for entitlement to payment for the off day.

CHAPTER V

WELFARE AND AMENITIES

Welfare activities undertaken by employers and various amenities provided to factory workers fall under two distinct categories, viz., (a) obligatory, i.e., those prescribed under the Factories Act, 1948, and (b) non-obligatory, i.e., those which are not statutory but are being provided by employers of their own accord as a moral obligation or in a spirit of benevolence. Details collected during the Survey relating to both the types of facilities are discussed in the following paragraphs.

(a) *Obligatory*

5.1. *Drinking Water Facilities*

All the electrical machinery factories surveyed had provided drinking water facilities to their employees. There was, however, considerable diversity in the type of arrangements made. It is estimated that in the industry, as a whole, about 44 per cent. of the factories had only earthen pitchers, 14 per cent. taps only, 9 per cent. hand pumps only and the rest had an assortment of various types of arrangements, e.g., earthen pitchers, taps, buckets and/or drums, etc.

The rules framed by the State Governments under the Factories Act, 1948, lay down that "every factory employing more than 250 workers should supply drinking water cooled by ice or other effective method during certain specified period of the year". In the course of the Survey it was found that only one factory in the Residual Group was under a statutory obligation to supply cool drinking water to its employees during summer months. This factory had duly complied with the law and had installed mechanical coolers and had also kept earthen pitchers. In addition, a few more factories, which were not under any statutory obligation, also stated that they made special arrangements for supplying cool drinking water during summer months. Thus, it is estimated that the percentage of factories making special arrangements for cool water during summer months was about 91 in the country. Of these, about half provided only earthen pitchers and the rest supplied either iced water or installed mechanical coolers during summer months only.

5.2. *Washing and Bathing Facilities*

All the factories covered in the course of the Survey were found to have made some arrangement for washing. In most of them, they were in the form of taps on stand pipes. In others, either wash basins with taps or circular troughs of the fountain type had been provided. It is estimated that of the factories providing washing facilities, about 65 per cent. were supplying soap to workers for cleansing purposes. One factory covered in the Residual Group was reported to be providing towels as well. Women were not employed in any of the sampled factories and hence the question of providing separate facilities for them did not arise.

It is estimated that bathing facilities were available in about 39 per cent. of the factories in the industry, as a whole. With the exception of one factory covered in the Residual Group, everywhere bath-rooms were found to be neat and clean.

5.3. *Lockers*

Locker facilities were found to be existing in one factory in Maharashtra and two in the Residual Group, i.e., about 29 per cent. of the factories in the country, as a whole.

5.4. *Canteens*

Under the Factories Act, only those establishments which employ over 250 workers, and are specifically ordered to do so, are required to maintain a canteen for the use of workers. Only one factory covered in the Residual Group employed more than 250 workers and it had provided a canteen. Two other factories, one each in the Residual Group and Maharashtra, had also provided canteens, though they were not obliged to do so. Thus, it is estimated that about 18 per cent. of the factories in the country had canteens. In one factory, the canteen was being run jointly by workers and management, in the second by the management and in the third by a contractor. In one canteen, tea, coffee and snacks were sold on a "no-profit, no-loss" basis, and in the other two, besides the above items, meals were also served at subsidised rates.

A Canteen Managing Committee, as required by law, existed in the factory which was under a statutory obligation to do so and prices of the items sold were also fixed by this Committee. Price list of items sold was also properly displayed. In another establishment covered in the Residual Group, such a Committee was also functioning and it fixed the prices. Managements of two factories granted regular subsidy to the canteens. With the exception of one factory located in the Residual Group, elsewhere location of the canteens and hygienic conditions were found to be good. Judging from the proportion of workers patronising the canteens, it was found that they were quite popular in all the three units.

5.5. *Rest Shelters*

Provision of rest shelters is obligatory for those factories alone which employ more than 150 workers and do not have canteens of the prescribed standards. The percentage of such factories in the industry was estimated to be 27 and it comprised four factories located in the Residual Group. Of these, two factories had provided rest shelters, while the third had a canteen of the prescribed standard and hence was free not to provide a rest shelter. The remaining factory had neither provided a canteen nor a rest shelter. The reason given by the management for not complying with the law was lack of space. None of the other factories surveyed had any rest shelters.

5.6. *Creches*

None of the factories covered employed any woman worker and hence the question of providing creche did not arise.

5.7. Medical Facilities

Under the Factories Act, 1948, employers are required to maintain first-aid boxes at a prescribed scale and containing the prescribed contents. Though all the factories in the industry had maintained first-aid boxes, but only about 47 per cent. of them kept the prescribed contents. In about two-thirds of the factories, the first-aid boxes were readily accessible.

The law requires that such boxes should be kept under the charge of trained first-aiders. But only about one-third of the factories had complied with this requirement. In all these factories, the trained first-aiders were holding diploma of the St. John's Ambulance.

These establishments which employ more than 500 workers are further required under the Factories Act to maintain ambulance rooms. Only one such factory was in the sample and it had not complied with the law.

Besides the above arrangements, the managements of factories are not under any statutory obligation to provide any other medical facility. But it was noticed that one factory covered in Maharashtra maintained a dispensary for the benefit of its employees. The dispensary, which was common for all the units under the same management, was under the charge of five full-time doctors and one part-time doctor together with other ancillary staff to assist them. As regards in-door treatment, the management had made arrangement with some of the local hospitals where a few beds were provided for their employees.

(b) Non-obligatory

5.8. Recreation Facilities

It is estimated that facilities for the recreation of workers existed in about 51 per cent. of the factories in the country. The types of arrangements made, however, varied from one factory to another. Of the factories having arrangements for recreation of workers, 36 per cent. had provision for both out-door and in-door games and also organised religious and social functions. About 36 per cent. arranged religious and social functions only, nearly 19 per cent. out-door games only and the rest both out-door games and religious and social functions. In majority of the factories (62 per cent.) providing recreation facilities, the cost was being met entirely by the managements and such factories were all situated in the Residual Group. In the rest, (i.e., Maharashtra alone), the cost was met jointly by the managements and workers. About 48 per cent. of the factories had constituted committees for organising recreation activities but in the rest, such arrangements were being looked after by the employers themselves.

5.9. Educational Facilities

None of the factories surveyed had made any arrangements for the education of either workers or their children. However, one of the factories covered in Maharashtra was reported to be giving scholarships to workers' children.

5.10. Other Facilities

5.10.1. *Transport Facilities*—Of the factories covered in the Survey, only one located in Maharashtra provided transport facilities to employees.

5.10.2. *Grain Shops*—A grain shop was being run by only one of the factories covered in Maharashtra. In this shop, articles were sold to the employees at market price.

5.10.3. *Co-operative Credit Societies*—Co-operative movement was not much in evidence in the industry. During the course of the Survey, only two factories, i.e., one each in Maharashtra and the Residual Group, had co-operative credit societies. In the factory in Maharashtra, an employee could become a member of the credit society by purchasing one or more shares of Rs. 10 each subject to a maximum of 50 shares. A member was entitled to take loans from the society up to ten times the paid-up value of his shares, subject to a maximum of Rs. 2,000 or twelve months' basic pay, whichever was less. The loan was recoverable in easy monthly instalments. In the other factory, only permanent employees were eligible to become members of the society. The value of one share was Rs. 10 and the maximum number of shares which a member could purchase was 40. Members could take a loan up to Rs. 100 repayable in 12 instalments. The co-operative society had also entered into an agreement with a local cloth dealer to sell cloth to members of the society on credit basis. The money was deducted by the management from the salary of the employees concerned and handed over to the cloth merchant. The credit society was managed wholly by the employees and management gave only some financial assistance to it.

5.11. Housing

At the time of the Survey, about 32 per cent. of the factories in the country were found to have provided housing accommodation to their workers. The following Statement shows the details regarding accommodation, rent charged, etc.

STATEMENT 5.1

Proportion of Electrical Machinery Factories Providing Housing Accommodation to Their Employees, Extent of Accommodation, Rent Charged, etc., in 1961

Centre	Number of factories*	Percentage of factories providing houses	Estimated number of houses provided	Estimated percentage of houses with		Estimated percentage of factories which charged	
				One room	Two rooms	Rent from all	Rent from none
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1. Maharashtra	21	23.8	80	81.2	18.8	100.0	..
2. Residual	31	38.2	39	94.2	5.8	..	100.0
3. All India	52	32.4	119	85.5	14.5	29.7	70.3

* This number does not tally with the number of factories in Statement 1.2. The difference is due to the fact that only those factories which continued to exist till the time of the Survey were covered.

The percentage of factories providing housing facilities to their workers was higher in Residual Group (38) as compared to Maharashtra (24). The majority of houses provided were one-room tenements. Usually two-room accommodation was allotted to technical or supervisory staff. The proportion of workers housed was very small, being 3 per cent. in the industry, as a whole, indicating that the facility was available to only a restricted number of employees. The Statement below gives the other related details in regard to housing facility.

STATEMENT 5.2

Percentage of Factories providing Housing Accommodation to Different Categories of Workers in 1961

Centre	Estimated number of workers as on 30th June, 1961	Estimated percentage of workers allotted housing accommodation	Estimated percentage of factories providing houses	Estimated percentage of factories* where houses were allotted to		
				Only watch and ward staff	Only some employees of various categories	All workers
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Maharashtra ..	3,523	7.8	23.8	..	..	100.0
2. Residual ..	8,311	1.2	38.2	81.0	19.0	..
3. All India ..	11,834	3.2	32.4	56.9	13.3	29.8

*Percentage relates to factories in col. (iv).

Of the factories providing housing accommodation, about 57 per cent. provided houses to watch and ward staff only, about 30 per cent. to all workers and the rest to a few employees only.

Nearly 70 per cent. of the factories providing houses did not charge any rent and all of them were located in the Residual Group. Of the factories covered in the Survey, only one establishment in Maharashtra was found to be charging rent from all employees at the rate of 15 per cent. of basic wages subject to a minimum of Rs. 18 and a maximum of Rs. 25 per month according to the type of accommodation provided. On this basis, the percentage of factories charging rent is estimated to be 30 for the industry, as a whole,

CHAPTER VI

SOCIAL SECURITY

Prior to the attainment of Independence, factory workers in the country enjoyed only a limited amount of social security. It was mainly in the shape of Workmen's Compensation Act passed by the Central Government. Women workers, in addition, were entitled to maternity benefit under the laws passed by State Governments. Since Independence, there has been a considerable enlargement of the scope and content of social security benefits largely as a result of adoption of such statutory measures as the Employees' State Insurance Act and the Employees' Provident Fund Act. The following paragraphs describe briefly the social security enjoyed by workers in the electrical machinery factories at the time of Survey.

6.1. *Provident Funds*

The scheme framed under the Employees' Provident Fund Act, 1952, was put into force with effect from 1st November, 1952, initially in six industries, Electrical Machinery Industry being one of them. At its inception, the scheme applied only to those factories which employed 50 or more workers and had completed three years of existence. The employment limit was reduced to 20 with effect from 31st December, 1960. It is estimated that on 30th June, 1961, about 77 per cent. of electrical machinery factories in the country had provident fund schemes and about 62 per cent. of the workers were their members. The percentage of workers who were members of the funds was about 87 in Maharashtra and 51 in the Residual Group.

Information collected regarding the date of introduction of provident fund schemes in various factories covered shows that prior to the enactment of the Employees' Provident Fund Act, 1952, only about 14 per cent. of factories in the industry had such schemes. At the time of the Survey, schemes in all except 18 per cent. of factories referred to above, were under the Employees' Provident Fund Act. Thus, the extensive nature of the benefit now enjoyed by workers is obviously due to the enactment of the Act. All these factories, which had introduced schemes even prior to the enforcement of the Employees' Provident Fund Act, continued their old schemes because the rate of contribution was either identical with or even better than that provided under the Act. For instance, in one of these factories the rate of contribution of workers as well as management was $6\frac{1}{4}$ per cent. of basic earnings for those getting up to Rs. 100 per month as basic wages and for others it was 8 per cent. Other factories introduced the statutory scheme for workers but for those employees who were not covered under the statutory scheme, they continued their old scheme. The rate of contribution was $8\frac{1}{4}$ per cent. of basic wages and an equal sum was being contributed by the managements.

Wherever the funds were instituted under the Employees' Provident Fund Act, 1952, the qualifying conditions, rate of contribution, etc., were uniform and were the same as prescribed under the Act. That is, membership was open to all those employees who were receiving up to Rs. 500 per month and had completed a continuous service of one year. The rate of contribution of employees was $6\frac{1}{4}$ per cent. of their basic wages and dearness allowance including cash value of food concessions, if any, and an equal sum was being contributed by employers.

6.2. *Pension Schemes*

There was no pension scheme in any of the factories surveyed.

6.3. *Gratuity Schemes*

It is estimated that in the industry, as a whole, gratuity was being paid to workers in about 28 per cent. of the factories. Of the establishments paying gratuity, one was located in Maharashtra and two in the Residual Group. Two factories, one each in Maharashtra and the Residual Group, had regular gratuity schemes, while in the third, the payment was made entirely at the discretion of the management. The factory located in Maharashtra paid gratuity only to permanent workers in the event of retirement, death or resignation after completion of 3 years' service. The rate of payment was one month's pay for each completed year of service subject to a maximum of 15 months' pay. In one of the factories covered in the Residual Group also, the scheme was applicable to permanent workers who had put in 5 years of service and gratuity was paid at the rate of 15 days' basic wages for each year of completed service, subject to a maximum of 15 months' wages. In the other factory, all workers were eligible to receive the benefit in the event of death only. The gratuity was paid at the rate of Re. 0.06 for each day of service rendered.

6.4. *Maternity Benefits*

None of the factories surveyed employed women and hence no case of payment of maternity benefit was reported.

6.5. *Industrial Accidents*

From the data collected for the year 1960-61, it is estimated that accidents occurred in about 79 per cent. of the electrical machinery factories in the country. Nearly 99 per cent. of the workers involved in accidents suffered temporary disabilities and the rest permanent disabilities. No fatal accident was reported by any of the factories covered. All accidents relating to permanent disabilities were reported by one of the factories covered in Maharashtra. Taking the industry, as a whole, it is estimated that the accident rate per thousand workers employed was about 60.

None of the establishments covered in the Survey reported any occupational disease.

CHAPTER VII

INDUSTRIAL RELATIONS

Separate statistics relating to number and nature of industrial disputes in the Electrical Machinery Industry are not available and hence it is not possible to comment on the trend and state of labour-management relations in the industry. However, in the course of the Survey, information was collected on certain aspects relating to industrial relations, e.g., extent of development of trade unionism and the arrangements existing in the establishments for promoting close contacts and cordial relations between labour and managements. The findings are discussed in the following paragraphs:—

7.1. Trade Unionism

The results of the Survey show that trade unions were in existence in about 23 per cent. of the electrical machinery factories in the country. An attempt was also made to collect statistics in regard to the number of workers who were members of the unions in the sampled establishments on 30th June, 1961. Since usually records showing membership figures were either not available or were found to be improperly maintained, reliance had to be placed on the version of the trade union officials. The information, thus, collected shows that from the point of view of proportion of workers who were members of unions, the position was slightly better. It is estimated that in the industry, as a whole, nearly 37 per cent. of workers were members of unions on 30th June, 1961.

Of the factories covered, only in one there were two unions, elsewhere there was only one union each. The managements of all factories having unions had accorded recognition to them.

By and large, the only activity of the unions was securing of claims of their members under various labour Acts. Only in one factory in the Residual Group, a union claimed that it provided relief to its members in cases of distress.

7.2. Agreements

In the course of the present Survey, information was collected regarding agreements affecting terms and conditions of service concluded between employers and workers since 1956. The results show that such agreements were concluded in three factories belonging to Residual Group or about 13 per cent. of factories in the industry, as a whole. The issues settled mostly related to wages, dearness allowance, leave, bonuses, increments, standing orders, recognition of trade unions, etc.

7.3. *Standing Orders*

Under the Industrial Employment (Standing Orders) Act, 1946, framing of Standing Orders is obligatory for only those establishments which employ 100 or more workers but power is conferred on State Governments to extend the provision of the Act to establishments having lesser employment. The Survey results show that all the sampled factories which were under a statutory obligation to frame Standing Orders, had done so. None of the other factories had framed such orders, presumably because they were under no obligation to do so. Thus, it is estimated that the percentage of factories having Standing Orders in the country, as a whole, was nearly 37. Everywhere, Standing Orders were certified and covered all workers. Barring one factory surveyed in Maharashtra, where Standing Orders were framed under the Bombay Industrial Relations Act, elsewhere they were framed under the Industrial Employment (Standing Orders) Act, 1946.

7.4. *Labour and Welfare Officers*

With a view to enabling employers to have better arrangements for personnel management and to help them in ensuring proper implementation of labour laws, a specific provision has been made in the Factories Act requiring all factories employing 500 or more workers to appoint a Labour/Welfare Officer. The rules framed by the State Governments under the Act prescribe the functions and duties of these officers, which are generally as follows: (a) to promote harmonious relations between workers and the management and to act as a liaison officer between them, (b) to attend to grievances of workers and secure their redress, (c) to advise management with a view to ensuring compliance with the provision of the Acts relating to health, safety and welfare of workers, (d) to assist in formation of Works Committees or Committees relating to production, safety or welfare, and (e) to organise and supervise welfare activities.

Only one factory located in the Residual Group was found to be employing more than 500 workers and was, thus, under a statutory obligation to appoint a Welfare Officer and it had done so. In addition, one of the factories surveyed in Maharashtra which was not under any statutory obligation, had also a full-time Welfare and Personnel Officer who was looking after all the units under the same management. Thus, the percentage of factories having Welfare Officer, etc., is estimated to be about 14 in the industry, as a whole.

Welfare Officers usually stated that their functions were the same as prescribed in the rules framed by the State Governments under the Factories Act. In some cases, they also represented employers in adjudication proceedings.

7.5. *Works and Joint Committees*

Under the Industrial Dispute Act, 1947, constitution of Works Committees is obligatory for those industrial establishments which employ 100 or more workers. Some of the State laws, which were

in force at the time of the Survey, also provided for the constitution of Joint Committees in certain types of establishments. The main idea behind the formation of such Committees is to provide a forum for mutual discussion of matters concerning day-to-day relationship between employers and employees so that sources of friction could be eliminated in their initial stages and, thus, good relationship between the two parties could be ensured.

It is estimated that, at the time of the Survey, nearly 37 per cent. of the factories in the industry were under a legal obligation to constitute Works Committees. Of these, only about 23 per cent. had actually complied with the requirements. All these factories were located in the Residual Group and in all of them the Committees consisted of an equal number of representatives of managements and workers. While some of the Committees met quite frequently, others held only a few meetings. The Committees which were quite active discussed a wide variety of items such as change of factory timings in winter, electrification of labour quarters, repair of workshop floors, provision of better urinal arrangements, supply of municipal water in factory and installation of water coolers. Others discussed only matters pertaining to increase in productivity. Except in the case of issues relating to urinals, machanical coolers and supply of municipal water, decisions were taken on all matters and they were implemented. Action had also been initiated by the managements on the remaining items. An impression was gathered that in two units the employees were not satisfied with the working of the Committees since they felt that the managements were not taking interest in the proper functioning of the Committee. Of the defaulting employers, a few stated that they had not constituted the Committees as they never felt the need for them; some attributed it to lack of enthusiasm among workers and the rest pleaded ignorance of the law.

7.6. Other Committees

Among the factories surveyed, a Safety Committee was found to be existing in only one factory in the Residual Group. The Committee consisted of four representatives of workers and three of the management. The main object of the Committee was to suggest ways and means for ensuring safety. Besides this Committee, no other committee of any type was found to be existing in any of the factories covered.

7.7. Grievance Procedure

One of the items covered by Standing Orders framed under the Industrial Employment (Standing Orders) Act, 1946, is the arrangement for settling complaints of workers. Since nearly 37 per cent. of the factories in the industry had framed Standing Orders under the above Act, they had a specified arrangement for the settlement of grievances of employees. But in actual practice, it was found that, with a few exceptions, the general practice was that whenever a worker had any grievance, he approached the Manager or the proprietor and made an oral complaint. In some of the factories, complaints were initially heard by the Supervisor or Foreman and the

complainant approached the Manager or the proprietor only when he was not satisfied with their decision. In one factory in the Residual Group, there was a complaint box outside the Manager's office and complainants were advised to put their grievances in it. The decision on the complaints so received was taken by the Manager in consultation with the members of Works Committee and in case of dispute, the matter was referred to the Managing Director, who consulted officials of the Union before arriving at any decision. The management stated that cases were generally disposed of within a period of 10 days. In a few factories, Welfare Officers and departmental heads also assisted in the settlement of grievances of the employees.

7.8. Workers' Participation in Management

According to the findings of the Survey, in none of the establishments workers were associated with the management of the unit.

CHAPTER VIII

LABOUR COST

Information relating to labour cost was collected in respect of those employees in the sampled establishments who were covered under the Factories Act and were receiving less than Rs. 400 per month as wages. This was in pursuance of the decision taken by the Study Group on Wage Costs appointed by the Ministry of Labour and Employment in 1959. The study pertaining to labour cost was modelled on the lines of the "Study of Labour Cost in European Industry" made by the International Labour Office in 1956, with such modifications as were necessary in the light of conditions in India. For instance, in view of the fact that in India wages are paid on the basis of 'day' instead of 'hours', as in European countries, the data were collected for the man-days and not man-hours. Similarly, it was found in the course of the pilot enquiry that, but for a very few exceptions, none of the establishments maintained any separate records of payments made for leave and holidays or for days not worked and hence these were dropped as separate items and included under 'basic wages'. Certain additions were made in the list either on the basis of the decisions of the Study Group referred to above for eliciting separate information on some of the items on which employers have to incur expenses under labour laws in force in the country e.g., lay-offs, washing facilities, etc.

The Survey was launched late in July, 1961, and was completed in August, 1962. With a view to obtaining a better estimate of costs in regard to the items of welfare, amenities, etc., salaries and allowances, etc., of those persons who were employed in connection with these items, even though they were covered under the Factories Act and were receiving less than Rs. 400 per month, were not included in the general head 'wages'. Expenses incurred in connection with such persons were recorded against the item for which they were employed. Similarly, man-days worked by such persons were also excluded. For purposes of collecting labour cost data, the field staff was instructed to obtain figures of expenditure incurred by the employers during the calendar year 1960. However, where the financial year of the sampled units was other than the calendar year 1960, or where the account books for the specified period were found to be not ready or available for some reasons, the field staff was permitted to take the information for the latest year for which it was available, subject to the condition that at least a major part of 1960 was covered. Except for two of the sampled factories, in all cases it was possible to obtain data for the year 1960. In one of the two units mentioned above, information was collected for the period April, 1960 to March, 1961, and in the other for June, 1960 to May, 1961. Since in both these cases also, a major part of 1960 was covered, the information given below can be treated to relate to the year 1960.

8.1. Labour Cost Per Man-day Worked

The data collected show that the labour cost per man-day worked in the industry was Rs. 5.94. It was Rs. 8.53 in Maharashtra and Rs. 4.75 in the Residual Group.

8.2. Components of Labour Cost

Statement 8.1 shows the break-up of labour cost by components.

STATEMENT 8.1
Estimated Labour Cost Per Man-day Worked By Components in 1960

Centre	Wages	Premium pay for overtime and late shifts	Bonuses	Other cash payments	Payments in kind	Social security contributions		Subsidies	Welfare centres non-obligatory	Direct benefits	Payments related to labour cost	Others	Total
						Obligatory	Non-obligatory						
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)
1. Maharashtra..	7.61 (89.22)	*	0.02 (0.23)	0.18 (2.11)	0.01 (0.12)	0.39 (4.57)	0.03 (0.35)	0.24 (2.81)	..	..	0.05 (0.59)	..	8.53 (100.00)
2. Residual ..	4.18 (88.00)	0.02 (0.42)	0.20 (4.21)	*	0.01 (0.21)	0.21 (4.42)	0.02 (0.42)	0.08 (1.69)	..	..	0.01 (0.21)	0.02 (0.42)	4.75 (100.00)
3. All India ..	5.25 (88.38)	0.02 (0.34)	0.14 (2.36)	0.06 (1.01)	0.01 (0.17)	0.27 (4.55)	0.02 (0.33)	0.12 (2.02)	..	..	0.03 (0.50)	0.02 (0.34)	5.94 (100.00)

(The figures shown in brackets are percentages to total in col. xiv).

*Indicates that the expenses were less than Re. 0.065 per man-day worked.

8.2.1. *Wages*—The term 'wages' includes basic wage, dearness allowance, incentive or production bonus and attendance bonus. It was decided to collect data under this head in respect of the man-days actually worked. However, in the course of the pilot enquiry, it was found that most of the employers did not maintain separate records of payments made for the days worked and for leave and holiday periods. Consequently, there was no alternative but to record sums paid for the days worked as well as for the days not worked but paid for.

Of the various components, 'wages' alone accounted for about 88 per cent. of the total labour cost in the industry. The Statement below shows the break-up of the figures of 'wages' according to components, viz., basic wage (including dearness allowance), production or incentive bonus and attendance bonus.

STATEMENT 8.2

Break-up of Wage Cost by Components in 1960

					(In Rupees)			
Centre					Basic wage and dearness allowance	Incentive or Production bonus	Attendance bonus	Total
(i)					(ii)	(iii)	(iv)	(v)
1. Maharashtra					7.61 (100.00)	*	*	7.61 (100.00)
2. Residual					3.74 (89.47)	0.44 (10.53)	..	4.18 (100.00)
3. All India					4.95 (94.29)	0.30 (5.71)	*	5.25 (100.00)

(The figures shown in brackets are percentages to total in col. v).

*Indicates that the expenses were less than Re. 0.005 per man-day worked.

Basic wage and dearness allowance alone accounted for about 94 per cent. of the total labour cost of the group and production or incentive bonus for the balance. In Maharashtra, practically the whole of the cost in this group was claimed by basic wage including dearness allowance and the share of other components was very negligible.

8.2.2. *Premium Pay for Overtime and Late Shifts*—Under this head, only the premium part of the payments made for overtime work or late shift was taken into account. For example, if a worker was paid one and a half times his normal rates of wages for working late hours, only the extra amount paid to him, i.e., one half in this case, was treated as the premium pay. This element of payment constituted 0.34 per cent. of the total labour cost in the industry.

8.2.3. *Bonuses*—This component comprises payments made on account of festival year-end and other such bonuses paid to employees. It formed the third important element of labour cost, i.e., next only to 'wages' and 'social security contributions', and accounted for 2.36 per cent. of the total labour cost. The expenses reported under this head, however, related to festival and year-end bonus only.

8.2.4. *Other Cash Payments*—The figures given in Statement 8.1 show that 'other cash payments' constituted only 1.01 per cent. of the total labour cost and were attributable to travelling allowance, gratuitous payment, etc.

8.2.5. *Payments in Kind*—Under this head, expenses relating to supplies of food articles, distribution of sweets and clothes on religious occasions, etc., were accounted for. This element formed a very negligible proportion of the total labour cost (i.e. 0.17 %).

8.2.6. *Social Security Contributions*—Next to "wages", social security contributions were the most important element of the labour cost in the industry and accounted for 4.88 per cent. of the total. Information in respect of this component was obtained under two distinct heads—(a) obligatory, i.e., those payments which the employers were required to make under certain labour laws, and (b) non-obligatory i.e., those expenses which employers were incurring voluntarily. Statement 8.3 shows the break-up of expenses under various sub-groups relating to Obligatory as well as Non-obligatory Social Security Contributions.

It will be seen from the Statement 8.3 that the labour cost on account of obligatory social security contributions mainly consisted of provident fund (81.48 %), Employees' State Insurance Contributions (14.82 %) and compensation for employment injury (3.7 %). A very negligible sum was reported to have been spent by one factory in the Residual Group as lay-off compensation and hence it has not been reflected in the overall figure.

As regards non-obligatory social security contributions, an estimated amount of Re. 0.02 per man-day worked was being spent in factories surveyed in the Residual Group and Re. 0.03 in Maharashtra. The payments were mainly in the shape of gratuity.

8.2.7. *Subsidies*—Under this head, expenses incurred by employers in providing various types of facilities and services to their employees and members of their families were recorded. These included Medical and Health Services, Canteens, Restaurant and Other Food Services, Company Housing, Building Fund, Credit Unions and Other Financial Aid Services, Educational Services, Cultural Services, Recreation Services, Transport Sanitation (at work places), Drinking Water Facility, Vacation Homes, etc. The amounts recorded were net payments made including depreciation but excluding capital expenditure.

STATEMENT 8.3

Estimated Cost of Social Security Contributions Per Man-day Worked in 1960

(In Rupees)

Centre	Obligatory										Non-obligatory	Total obligatory and non-obligatory	Percentage of social security contributions to total labour cost
	Provi- dent fund	Retren- ment com- pensation	Lay-off com- pensation	Emp- loyees' State Insur- ance Contri- butions	Compensation for Emp- loy- ment injury	Occu- pational disease	Mater- nity bene- fits	Depend- ants allow- ance	Others	Total			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)
1. Maharashtra	..	0.35 (89.74)	..	0.01 (2.57)	0.03 (7.69)	..	..	..	..	0.39 (100.00)	0.03	0.42	4.92
2. Residual	..	0.16 (76.19)	..	* 0.05 (23.81)	*	..	..	..	..	0.21 (100.00)	0.02	0.23	4.84
3. All India	..	0.22 (81.48)	..	* 0.04 (14.82)	0.01 (3.70)	..	..	..	..	0.27 (100.00)	0.02	0.29	4.88

Figures in brackets are percentages to col. (xi).

*Indicates that the expenses were less than Re. 0.005 per man-day worked.

In the course of the pilot survey it was experienced that employers did not maintain separate records for the above mentioned items or the expenses incurred related not only to persons falling within the scope of the study but also to others. Due to these limitations, the field staff was asked to obtain estimates from employers, wherever separate data were not available. In case any expenses were incurred on workers covered by the Study as well as on other employees, the amount was estimated on the basis of the proportion which the persons covered under the Study formed to the total employed. Statement 8.4 presents the cost of subsidies per man-day worked in the industry.

Expenses on account of subsidies formed 2.02 per cent. of the total labour cost in the industry. The highest expenditure was on Medical and Health Services constituting about 67 per cent. of the total expenses under the group. Next in the order were Sanitation (17 %) and Recreation Services (8 %). Only a few units spent on canteens and company housing and very little expenses were incurred on drinking water facilities. These have, therefore, not been reflected in the overall figures in Statement 8.4.

8.2.8. *Payments Related to Labour Cost*—Under this group, expenses relating to apprenticeship schemes and on-the-job medical services were recorded. A perusal of Statement 8.1 (col. xii) would show that this element constituted only 0.5 per cent. of the total labour cost in the industry. About 63 per cent. of the expenditure under this group was on account of apprenticeship schemes and the balance was attributable to on-the-job medical services.

8.2.9. *Others*—Under this head, only those expenses which could not be grouped under any of the heads or sub-heads of the labour cost items, were recorded. Consequently, expenses incurred by some factories on supply of protective equipment and uniforms to employees, etc., had been reported under this head. This element formed only 0.34 per cent. of the total labour cost.

STATEMENT 8.4

Estimated Cost of Subsidies Per Man-day Worked in 1960

(In Rupees)													
Centre	Medical and health services	Can- teens services	Restau- rant and other food services	Com- pany housing services	Creches	Cul- tural services	Recrea- tion services	Trans- port	Sanita- tion	Drinking water	Others	Total	Percen- tage of subsidies to total labour cost
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)
1. Maharashtra	..	0.23 (95.83)	0.01 (4.17)	..	..	..	*	..	*	*	*	0.24 (100.00)	2.81
2. Residual	..	0.02 (25.00)	*	..	..	..	0.01 (12.50)	..	0.03 (37.50)	0.01 (12.50)	0.01 (12.50)	0.08 (100.00)	1.69
3. All India	..	0.08 (66.67)	*	..	*	..	0.01 (8.33)	..	0.02 (16.67)	*	0.01 (8.33)	0.12 (100.00)	2.02

(Figures shown in brackets are percentages to total in col. xiii).

*Indicates that the expenses were less than Re. 0.005 per man-day worked.

CHAPTER IX

SUMMARY OF CONCLUSIONS

Before the Second World War, the Electrical Machinery Industry in India was hardly of any significance. It was only after the country entered the era of planned economic development that it made a rapid progress. At the beginning of the First Five Year Plan, there were only 19 registered factories in the country employing nearly 2,000 persons. By the end of 1961, the number of registered factories rose to 59 with an average daily employment of about 10,000.

The data collected in the course of the Survey show that on 30th June, 1961, the estimated total number of persons employed in the industry was about 11,900. Of these, nearly 81 per cent. were "Production and Related Workers". "Clerical and Related Personnel" constituted the next important group and accounted for about 9 per cent. of the total, followed by "Professional, Technical and Related Personnel" forming about 6 per cent. of the total.

The entire working force in the industry consisted of men only and none of the factories covered employed any contract labour.

The predominant system of payment in the industry was by time and it covered about 96 per cent. of the workers. About 69 per cent. of workers in the industry were permanent, 16 per cent. apprentices and 14 per cent. temporary. About 70 per cent of production workers in the industry had less than 5 years' service to their credit and only about 17 per cent. had put in over 10 years' service. The higher proportion of workers with shorter length of service seems to be due to the fact that most of the electrical machinery factories were of recent origin. Such a conclusion is supported by quite a low rate of labour turnover in the industry. The accession and separation rates were of the order of 3.9 and 2.6 per cent. respectively during the period July, 1960 to June, 1961.

The average absenteeism rate in the industry during the same period, viz., July, 1960 to June, 1961, was 12.3 per cent. The monthly rates reflected the usual pattern of higher absences during summer months and sowing as well as harvesting seasons.

There has been no standardisation of wages in the industry on a country-wide basis. As a result, it was found that the rates of wages differed from one centre to another and at times even in different units in the same centre. The estimated average daily earnings of all workers in electrical machinery factories in the country were Rs. 5.52 in June, 1961. Similar figures in respect of men and lowest-paid production workers were Rs. 5.18 and Rs. 2.05 respectively. Considerable disparities existed between the earnings of workers employed in different areas.

This average daily earnings of clerical and related employees and of those belonging to the group 'Watch and Ward and Other Services' were Rs. 8.51 and Rs. 3.52 respectively in June, 1961.

Information collected in the course of the Survey in respect of the main components of earnings of all workers shows that basic earnings (i.e., basic wage and dearness allowance) constituted nearly 91 per cent. of the total earnings. Separate dearness allowance was paid by only about 38 per cent. of the factories. In only one factory covered in Maharashtra, dearness allowance was linked to the consumer price index number. Payment of other allowances, etc., was reported in only stray factories and their share in total earnings was negligible in all cases except production or incentive bonus.

There was no profit-sharing scheme in any of the factories covered and not many factories paid annual and festival bonus to their workers.

All the factories were found to be complying with the provisions of the law concerning hours of work and spread-over. As regards rest-interval, with the exception of one factory in the Residual Group, where no rest-interval was allowed to workers engaged on moulding work in the third shift, elsewhere no violations were reported.

About 71 per cent. of factories in the industry had made arrangements for sitting for all such workers as were obliged to work in a standing position.

All the factories surveyed were found to have provided latrines, though the type of arrangements made varied considerably. Everywhere the privies were found to be properly screened and with the exception of 14 per cent. of factories, all others had provided taps near latrines. The compliance of the law in regard to urinals, however, was not as good as only about three-fourths of the factories had made such arrangements. In 83 per cent. of the factories, due care was being taken to maintain latrines and urinals in a sanitary condition.

All the factories surveyed were found to be granting annual leave to their employees, generally in accordance with the provisions of the Factories Act. Data collected regarding the number of workers who availed of leave show that about 70 per cent. of workers had enjoyed leave during the year 1960 and about 25 per cent. availed of 11 to 15 days' leave.

The system of granting casual leave with pay was found to be in vogue in about 47 per cent. of the factories and the number of days allowed in a year varied from 3 to 15. Similarly, about 28 per cent. of the factories in the country were granting sick leave with pay to their employees.

The practice of granting national and festival holidays was found to be prevalent in all the factories covered in the Survey. The number of holidays allowed in a year ranged from 2 to 16 days but about three-fourths of them granted 6 to 10 holidays. All the sampled factories were complying with the provisions of the Factories Act regarding weekly offs.

Drinking water facilities for employees existed in all the electrical machinery factories covered in the course of the Survey. However, the type of arrangements made differed widely. Nearly 91 per cent. of the factories also stated that they made some arrangements for the supply of cool drinking water during summer months.

Besides those factories which were under a legal obligation to maintain a canteen, some others also had provided this facility. Thus, canteens were found to be functioning in about 18 per cent. of the total factories. Generally, these canteens served tea, coffee, snacks and meals either on a 'no-profit, no-loss' basis or at subsidised rates.

About 27 per cent. of the factories in the country were under a statutory obligation to provide rest shelters. Of these, nearly 75 per cent. had complied with the law.

First-aid boxes were being kept in all the factories but in only about 47 per cent. they contained all the prescribed items. The boxes were under the charge of trained first-aiders only in about one-third of the factories. Only one of the factories surveyed was under a statutory obligation to maintain an ambulance room, but it had not complied with the law.

Nearly 51 per cent. of the factories in the industry were found to be devoting some attention towards recreation of their employees. The types of arrangements made varied from one factory to another and were mostly in the form of in-door and out-door games and/or religious and social functions. In 62 per cent. of the factories, the cost of the activities was being met entirely by the managements and in the rest, jointly by workers and employers.

Practically no attention had been paid by managements towards the education of workers or their children.

Only a negligible number of factories had grain shops or co-operative credit societies.

The information collected on housing shows that about 32 per cent. of the factories were providing housing accommodation to their employees. However, the benefit was not very extensive and only about 3 per cent. of the workers had been housed.

Provident fund schemes existed in about 77 per cent. of the factories in the industry and it is estimated that about 62 per cent. of workers were members of the funds as on 30th June, 1961.

There was no scheme for payment of pension in any of the factories covered. However, gratuity schemes were found to be in existence in about 28 per cent. of the factories in the country.

On the basis of the information relating to industrial accidents collected in the course of the Survey, it is estimated that during 1960-61 such accidents occurred in about 79 per cent. of the electrical machinery factories and the proportion of workers involved in accidents was 60 per thousand employed. Almost all accidents were of a minor nature.

It is estimated that about 23 per cent. of the factories in the industry had trade unions and about 37 per cent. of workers were members of unions. All the trade unions were found to have been recognised by the managements. The main activity of the unions was securing claims of their members under various labour Acts and only a few provided some relief to distressed members.

There was little evidence of the growth of the system of collective bargaining in the industry.

All the factories which employed 100 or more workers had framed Standing Orders. Thus, it is estimated that, at the time of the Survey, about 37 per cent. of the factories in the industry had Standing Orders and they covered all workers.

Only one of the factories surveyed employed more than 500 workers and, hence, it was under a statutory obligation to appoint a Welfare Officer. In additions, another factory had also appointed a Welfare and Personnel Officer though it was not under any legal compulsion.

About 37 per cent. of the factories in the industry were under a statutory obligation to constitute Works Committees. But only about one-fourth of them had actually complied with the requirement. Besides a Safety Committee constituted in one of the factories, no other committee of any type was found to be functioning in any of the establishments surveyed.

Information collected regarding the system of settling grievances of workers in the industry shows that very few factories had made any systematic arrangement. The general practice was that whenever a worker had any grievance, he approached manager or proprietor and made an oral complaint.

Data relating to labour cost collected in respect of persons covered under the Factories Act and receiving less than Rs. 400 per month show that during the year 1960, the cost per man-day worked was Rs. 5.94. 'Wages', i.e., basic wage, dearness allowance and incentive payments, constituted the main component of labour cost and accounted for nearly 88 per cent. of the total. The other components of any significance were Social Security (5%). Bonuses (2%) and Subsidies (2 %).

APPENDIX

A Brief Note on the Sample Design and the Method of Estimation Adopted

1. *Sample Design*—For the Survey of Labour Conditions a multi-stage sampling procedure with industry as a stratum, with further regional strata for those industries which were found to be highly concentrated in particular regions or areas was followed. The registered factories belonging to those industries for which regional stratification was found necessary were stratified, and each centre or area of high concentration was taken as a separate regional stratum of the industry and the remaining scattered factories were clubbed together into a single residual stratum. Establishments in an industry/regional stratum were arranged in a frequency distribution fashion with suitable class intervals and were divided into two size-groups, large factories and small factories, on the basis of an optimum cut-off point derived for each industry/regional stratum. The optimum cut-off point was so derived that if all the establishments in the upper, size-group were included in the sample, the result obtained would yield an estimate of overall employment within 5 per cent. error at 95 per cent. confidence interval, and the sample size would be minimum. The optimum cut-off point varied from industry to industry, and between strata of an industry depending upon the number and the size of establishments.

However, considering the limited resources available for the Survey of Labour Conditions and the practicability, etc., it was thought that a sample of 25 per cent. from the upper size-group and 12½ per cent. from the lower size-group would yield reliable results. However, the experience of earlier Surveys had shown that due to (i) non-availability of very recent frame, (ii) closures, and (iii) units changing their line of production, considerable shrinkage had occurred to the desired sample size. Hence, it was decided that for taking into account such closures, etc., the required sample size should be increased to allow for the above mentioned shrinkage in the sample size. Having, thus, increased the sample size, the units which were found to be closed or which had changed their line of production have been simply ignored and no substitute for such cases has been made.

Primary sampling units, namely, registered factories, mines or plantations within an industry/regional stratum, were arranged by contiguous States and within each State by contiguous districts in a serpentine fashion so that districts formed a continuous chain from one State to another. Having arranged the list of units in the above manner, the units above the optimum cut-off point were taken in the upper size class and the rest in the lower size class. From these size-groups, the required number of units were selected by systematic sampling with a random start. The frame on the basis of which the sample was selected for the Electrical Machinery Industry was the list of Registered Factories for the year 1959.

2. *Method of Estimation*—In the course of the Survey, various characteristics were studied, some of which were correlated with employment whereas there were others which were correlated not with employment but with the number of establishments. Consequently, two different methods were used for working out estimates.

For estimating the totals of those characteristics which are highly correlated with employment such as absenteeism, labour turnover, earnings, labour cost, etc., ratio of total employment was used as blowing-up factor. For estimating the totals of those characteristics which are not correlated with employment such as, number of units providing certain welfare facilities, etc., ratio of units was used as blowing-up factor. Estimates of percentages have been arrived at by computing in each case the ratio of the estimates of the totals for the two characteristics involved.

In any stratum, the estimate for the total of x-characteristics not correlated with employment is given by

$$X = \frac{N_u - N'_u}{n_u - n'_u} \sum X_{i_u} + \frac{N_L - N'_L}{n_L - n'_L} \sum X_{i_L} \quad (1)$$

The summation extending over all sampled units surveyed in the stratum.

Where X = the estimated total of the x-characteristic for a particular stratum;

N_u and N_L = the number of units in the original population as featuring in the 1959 list, which was used as frame in the upper and lower size-groups respectively of the stratum concerned;

N'_u and N'_L = the number of units which featured in the 1959 list but were not featuring in the latest available list nearest to the period of survey in the upper and lower size-groups respectively of the stratum concerned;

n_u and n_L = the total number of units in the sample (from 1959 list) in the upper and lower size-groups respectively of the stratum concerned;

n'_u and n'_L = the number of sampled units, which were found at the time of the survey to be closed or to have changed the line of production and, hence, left out in the upper and lower size-groups respectively of the stratum concerned;

X_{i_u} and X_{i_L} = the total number of x-characteristic in the i -th sample unit of the upper and lower size-groups respectively of the stratum concerned.

The totals for an industry are obtained by summing up the totals obtained on the basis of the above formula for each one of the strata of the industry.

In any stratum the estimate for the y-characteristic correlated with Employment is given by

$$Y = \frac{E_{N_u} - N'_u}{E_{n_u} - n'_u} \sum Y_{i_u} + \frac{E_{N_L} - N'_L}{E_{n_L} - n'_L} \sum Y_{i_L} \quad \dots (2)$$

The summation extending over all sampled units surveyed in the stratum.

Where Y = the estimated total of the y -characteristic for a particular stratum.

$E_{N_u - N'_u}$ and $E_{N_L - N'_L}$ = the total employment in 1959 in the $N_u - N'_u$ and $N_L - N'_L$ units respectively.

$E_{n_u - n'_u}$ and $E_{n_L - n'_L}$ = the total employment in 1959 in $n_u - n'_u$ and $n_L - n'_L$ sampled units respectively.

Y_{i_u} and Y_{i_L} = the total number of y -characteristic in the i -th sample unit of the upper and lower size-groups respectively of the stratum concerned.

The totals for an industry are obtained by summing up the totals obtained on the basis of the above formula for each one of the strata of an industry.
